

Serial No.: 09/944,161
Filed: August 30, 2001

IN THE SPECIFICATION:

Please replace the paragraph starting on page 62, line 18, with the following rewritten paragraph:

- DNA-probe preparation: Two DNA probes for measure the wild type Cystic Fibrosis gene and the AF508 mutation of the Cystic Fibrosis were synthesised (DNA Technology, Aarhus, Denmark), both capture DNA-probe being 5 thiol modified.

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PROBE _{WCF} (SEQ ID NO: 1)	5' DMT-S-(CH ₂) ₁₂ CCATTAAAGAAAATATCATCTT-3'
PROBE _{ΔCF} (SEQ ID NO: 2)	5' DMT-S-(CH ₂) ₁₂ GCACCATTAAAGAAAATATCATCGG-3'

Table I: Capture probe wild type = PROBE_{WCF} and Capture probe ΔF508 mutation = PROBE_{ΔCF}

Please replace the paragraph starting on page 65, line 4, with the following rewritten paragraph:

-The detection of the ΔF508 mutation of the Cystic Fibrosis gene using the PCR based micro-cantilevers as a sensor can be divided into several procedures:

- a₂
1. Cleaning the gold micro-cantilever
 2. Immobilization of the detection probe to the surface of the micro-cantilever (programming of the micro-cantilever chip).
 3. DNA isolation from the biological sample (in this example three patient samples).
 4. Designing PCR primers for either single reactions or multiplex reactions.

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5. The reaction step involving simultaneously PCR reaction probe hybridization and a 3' extension reaction.
6. Measuring the bending of the micro-cantilever due to specific extension of the probe on the surface of the micro-cantilevers.

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Primer 1 _{CF} (SEQ ID NO: 3)	5'-AAGCAAGAATATAAGACATTGG-3' (sense)
Primer 2 _{CF} (SEQ ID NO: 4)	5'-CTATATTCATCATAGGAAACAC-3' (antisense)
PROBE _{WCF} (SEQ ID NO: 1)	5' DMT-S-(CH ₂) ₁₂ -CCATTAAAGAAAATATCATCTT-3'
PROBE _{ACF} (SEQ ID NO: 2)	5' DMT-S-(CH ₂) ₁₂ -GCACCATTAAAGAAAATATCATCGG-3'

Table II: Hybridization probes and PCR primers-

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[Please replace the paragraph starting on page 68, line 9, with the following rewritten paragraph:]

-The cleaning of the gold micro- cantilever was performed as described in example 1. The quantitative analysis by RT-PCR can be difficult because of the exponential nature of PCR. A small variation during the assay might yield a marked change in the amount of the final products. The use of internal standards is therefor desirable in quantitative RT-PCR analysis to correct variations in RT-PCR as well as product detection step (micro-cantilever detection). An ideal endogenous standard would be a transcript in which the expression is constant during the cell cycle, between cell types or in response to external stimuli. A housekeeping gene GAPD that is transcribed constitutively in most cell types and tissue has been commonly used as an invariant control.

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cont.

PROBE _{IL6} (SEQ ID NO:5)	5' DMT-S-(CH ₂) ₁₂ -CTGCGCAGCTTTAAGGAGTTCC-3'
PROBE _{GAPD} (SEQ ID NO:6)	5' DMT-S-(CH ₂) ₁₂ -CGCTGGGGCTGGCATTGCCCTC-3'
Primer 1 _{GAPD} (SEQ ID NO:7)	5'- CATCAAGAAGGTGGTGAAGC-3' (sense)
Primer 2 _{GAPD} (SEQ ID NO:8)	5'- GAGCTTGACAAAGTGGTCGT-3' (antisense)
Primer 1 _{IL6} (SEQ ID NO:9)	5'-ATGAACTCCTTCTCCACAAGCGC-3' (sense)
Primer 2 _{IL6} (SEQ ID NO:10)	5'- GAAGAGCCCTCAGGCTGGACTG - 3' antisense)

Table IV: Hybridization probes and PCR primers, both probes are located in close distance to PCR Primer 2_{IL6} and Primer 2_{GAPD} as illustrated in figure 17 and 18.-

[Please replace the paragraph starting on page 71, line 18, with the following rewritten paragraph:

--The cleaning of the gold micro-cantilever was performed as described in example 1.

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PROBE _{HSV} (SEQ ID NO:11)	5' DMT-S-(CH ₂) ₁₂ -CAGCAAGATAAAGGTGAACGGC-3'
Primer 1 _{HSV} (SEQ ID NO:12)	5'-ATCAACTTCGACTGGCCCTTC-3' (sense)
Primer 2 _{HSV} (SEQ ID NO:13)	5'-CCGTACATGTCGATGTTACC-3' (antisense)

Table VI: Hybridization probes and PCR primers. The PCR primer give a 179 bp fragment of the HSV polymerase gene, the HSV probe are located in close distance to Primer 2_{HSV}--

[On page 73, immediately preceding the claims, insert the enclosed text entitled "SEQUENCE LISTING".